

## Input Circuit for Inductive Speed Sensor

## Patent Claims:

1. Input circuit for an inductive speed sensor comprised of a first and a second circuit input (1, 2) each of which is connected to an input of a comparator (K) that serves to evaluate the signals from the inductive speed sensor and with a switchable voltage divider that is comprised of two resistors (R4, R5); and the first circuit input (1) is connected via the first resistor (R4) to the first input of the comparator (K), and the second circuit input (2) is connected via a second resistor (R5), which can be disconnected by way of a switching device (T1, T2), to the first input of the comparator (K) as well wherein the switching element (T1, T2) is switchable, depending on the speed, in particular in such a way that, if the speed value is above a predetermined speed, the resistor (R5) is connected to the second circuit input (2), and, if the speed value is below the predetermined speed, it is disconnected from the second circuit input.

2. Input circuit as claimed in claim 1

wherein

the switching element is comprised of at least one transistor (T1, T2) that is connected to a control device (M) which

blocks the transistor (T1, T2) at low speed and switches it to open at high speed.

3. Input circuit as claimed in claim 1 or claim 2

wherein

a p-channel MOS field-effect transistor is envisioned as transistor (T1, T2).

4. Input circuit as claimed in claim 2 or claim 3

wherein

two transistors (T1, T2) are envisioned that are arranged in different switching directions.  $\alpha$

5. Input circuit as claimed in one of the preceding claims

wherein

a micro-controller of the engine control is used as control device.

6. Input circuit as claimed in one of the preceding claims

wherein

a voltage divider that is comprised of two resistors (R3, R4) is envisioned, and wherein the resistor (R3) connects the second circuit input (2) to a certain constant voltage, and the other resistor (R4) connects the second circuit input (2) to the ground.

7. Input circuit as claimed in one of the preceding claims  
wherein

a resistor (R6) is envisioned that connects the second input  
of the comparator (K) to the second circuit input (2), and  
wherein a resistor (R7) is envisioned that connects the second  
input of the comparator (K) to its output.

8. Input circuit as claimed in one of the preceding claims  
wherein

two Zener-diodes (D1, D2), wired opposite in relation to each  
other, are envisioned between the first and the second circuit  
inputs (1, 2).

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